

REMARKS

Reconsideration of the above-identified patent application, as amended, is respectfully requested. The drawings have been objected to since they do not show the feature defined in claim 19. Claim 19 has therefore been cancelled.

Claim 18 has been rejected under 35 USC 112 since the specification does not enable the determination of the geometry of the tool. Claim 18 has therefore been cancelled.

Claim 16 has been indicated as allowable if amended to include the limitations of the base claim and any intervening claim. Claim 16 has therefore been amended accordingly and is therefore believed allowable.

Claim 20 has been amended to be depended upon claim 11 since it previously depended upon claim 19 that has now been cancelled.

The claims have been rejected in view of U.S. Patent 6,597,464 issued to Bucher.

Bucher describes a method of testing a cutting-edge geometry of a rotatably drivable tool with a measuring system. The testing is only performed during chosen detection time intervals that each comprises a standard time instant, each standard time instant being a time instant at which it is to be expected that the region to be tested enters the measuring range during rotation. To this end, the tool is positioned such that at least an envelope surface, produced by the rotation, of the tool region to be tested enters the measuring range (see claim 1 Bucher). In contrast thereto, in the present invention, the measuring position is detected and used for determining the position of the tool. The measuring position used is the instant when the measuring beam separates from envelope surface. According to claim 11, the measuring position is detected for a position of the

tool (14) in which the measuring beam (18) is not interrupted during at least one revolution of the tool (14). The procedure is not described by Bucher.

Support for the rejection is based on the following passage from Bucher: Col. 7, lines 19-22 and lines 30-35:

“To perform the method, it is necessary for the tool 20 to be rotated with a desired constant rotational speed before and/or while the test region 32 enters the measuring range 30 and test region 32 is situated in the measuring range 30.”

“Preferably, the measuring beam 14 is used to detect the entry of the envelope surface 210 into the measuring range 30. However, it is also possible, for example, to determine the entry of the envelope surface 210 into the measuring range 30 from the relative position of the tool 20 with respect to the measuring beam 14.”

These passages do not support the position that the last clause of claim 11, namely, “the measuring position is detected for a position of the tool (14) in which the measuring beam 18 is not interrupted during at least one revolution of the tool (14). The methodology of Bucher makes it mandatory that the tool initially is positioned such that at least its envelope surface interrupts the measuring beam. Without this interrupted measuring beam, it would be impossible to check the cutting edge geometry in the manner described in Bucher. In contrast thereto, the present invention does not require the determination of the position where the envelope surface interrupts the measuring beam. Rather, the present invention teaches to position the tool in the measuring beam; no determination of the position where the envelope surface interrupts the measuring beam is needed. According to the present invention, the measuring position is detected

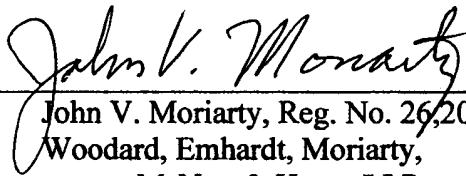
for a position of the tool (14) in which the measuring beam (18) is not interrupted during at least one revolution of the tool (14) – see claim 11.

Bucher does not begin to suggest the procedure defined in claim 11. Bucher (col. 6, line 63- - col. 7, line 3) teaches that in order to perform the Bucher method, it is necessary for the test region 32 to enter the measuring range 30. For this purpose, the tool 20 is moved out of position in which the test region 32 is situated outside the measuring range 30, as shown in Fig. 1, into a position in which the test region 32 is situated in the measuring range 30, as is to be seen in Fig. 2. The type of movement of the tool 20 does not play a role in executing the test method and is only necessary to ensure that the test region 32 enters the measuring range 30. The Bucher procedure is exactly the opposite of the claimed method of applicant's method as defined in claim 11, namely, the measuring position is detected for the position of the tool in which the measuring beam is not interrupted during at least one revolution of the tool.

The claims dependent on claim 11 are believed allowable for the same reasons as given above. It is therefore believed the application is in condition for allowance and such action by the Examiner is respectfully requested.

Submitted herewith is a certified copy of the parent PCT application as requested by the Examiner

Respectfully submitted,

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